

DAVITASHVILI, L.Sh.

[Theory of natural selection] Teoriia polovogo otbora. Moskva, Izd-vo Akad. nauk SSSR, 1961. 537 p. (MIRA 15:5)
(Paleontology) (Sexual instinct)

DAVITASHVILI, L.Sh.

Theory of the evolutionary process and problems of modern
biology. Trudy Inst. paleobiol. AN Gruz. SSR no.6:3-34 '61.
(MIRA 15:3)

(Evolution)

MCHEDLISHVILI, Nataliya Dmitriyevna, kand. biol. nauk;
DAVITASHVILI, L.Sh., red.; AVALIANI, N.M., red.izd-va;
BOKERIYA, E.N., tekhn. red.

[Flora and vegetation in the Cimmerian stage based on
data from palynological analysis] Flora i rastitel'nost'
kimmeriiskogo veka po dannym palinologicheskogo analiza.
Tbilisi, Izd-vo AN Gruz. SSR, 1963. 196 p.

(MIRA 16:12)

1. Deystvitel'nyy chlen AN Gruz.SSR (for Davitashvili).
(Palynology) (Paleobotany, Stratigraphic)

DAVITASHVILI, L. Sh.

Subdivision of the Miocene into stages and principles
underlying it. Trudy Inst. paleobiol. AN Gruz. SSR 8:73-84
'63.

Significance of the problem of migration for paleobiology
and historical geology. Ibid.:85-95 (MIRA 17:7)

DAVITASHVILI, L.Sh., akademik; ZAKHARIYEVA-KOVACHEVA, Kr.

Origin of the "Stone Forest" near Varna, Bulgaria. Soob. AN Gruz.
SSR 30 no.4:441-446 Ap '63. (MIRA 17:9)

1. Institut paleobiologii AN GruzSSR, Tbilisi. 2. Akademiya
nauk Gruzinskoy SSR (for Davitashvili).

DAVITASHVILI, L.Sh., prof.; ZAKHARIYEVA-KOVACHEVA, K.R.

Mystery of a "stone forest" in Bulgaria. Priroda 52 no.9:
90-91 '63. (MIRA 16:11)

1. Institut paleobiologii AN GruzSSR (for Davitashvili).
2. Sofiyskiy gosudarstvennyy universitet, kafedra paleontologii
(for Zakhariyeva-Kovacheva).

SULTANOV, K.M.; DAVITASHVILI, L.Sh., akademik, red.

[Apscheronian stage in Azerbaijan] Apsheronskii iarus
Azerbaidzhans. Baku, Azerbaidzhanskoe gos. izd-vo, 1964.
232 p. (MIRA 17:9)

1. Akademiya nauk Gruzinskoy SSR (for Davitashvili).

GABUNIYA, Leo Kalistratovich; DAVITASHVILI, L.Sh., red.

[Fauna of Oligocene vertebrates in Benara] Benarskaia
fauna oligotsenovykh pozvonochnykh. Tbilisi, Izd-vo
"Metsniereba," 1964. 265 p. (MIRA 18:4)

DAVITASHVILI, L.Sh.

What new information can paleobiological studies provide for geology?
Sov. geol. 8 no.5:3-10 My '65. (MIRA. 18:7)

1. Institut paleobiologii, Tbilisi.

BAGDASARYAN, Klara Grigor'yevna, mlad. nauchn. sotr., kand.
geol.-miner. nauk; DAVITASHVILI, L.Sh., red.

[Development of Chokrak mollusks in Georgia] Razvitie
molluskovoi fauny chokraka Gruzii. Tbilisi, Metsniereba,
1965. 230 p. (MIRA 18:7)

1. Institut paleobiologii AN Grus.SSR (for Bagdasaryan).

DAVITASHVILI, T.

Georgian S.S.R. Avt.transp. 35 no.10:17 0 '57.

(MIRA 10:10)

1.Ministr avtomobil'nogo transporta Gruzinskoy SSR.
(Georgia--Transportation, Automotive)

DAVITASHVILI, T.

Georgia's automotive transportation is growing and expanding.
Avt.transp. 39 no.2:3-5 F '61. (MIRA 14:3)

1. Ministr avtomobil'nogo transporta Gruzinskoy SSR.
(Georgia—Transportation, Automotive)

DAVITASHVILI, T.Sh.

Method for registration of luminous fluxes. Soob.AN Gruz.SSR 18
no.3:283-286 Mr '57. (MIRA 10:7)

1. Akademiya nauk Gruzinskoy SSR, Institut fiziki, Tbilisi.
Predstavleno akademikom I.L. Andronikashvili.
(Electron optics)

05469

SOV/120-59-3-40/46

AUTHOR: Davitashvili, T. Sh.

TITLE: Automatic Recording of Thermoluminescence Curves
(Avtomaticheskaya zapis' krivoy termosvecheniya)

PERIODICAL: Pribery i tekhnika eksperimenta, 1959, Nr 3,
pp 146-147 (USSR)

ABSTRACT: Fig 1 shows the photomultiplier circuit; the output from the photomultiplier is modulated by an alternating voltage applied to the first dynode (input at the bottom left). The valve used is 40 V at 910 c/s. The rectified output is applied to one half of a double recording oscillograph. The other half of the oscillograph records the output from the differential thermocouple, which is amplified by the circuit of Fig 2. (Here the input is modulated by a mechanical chopper.) Fig 3 shows a typical result for an X-rayed KCl crystal heated over the range 0 - 200°C. There are 3 figures and 5 references, 2 of which are Soviet, 2 English and 1 is a translation of an American book.

ASSOCIATION: Institut fiziki AN GruzSSR (Institute of Physics,
Academy of Sciences of the Georgian SSR)

SUBMITTED: May 4, 1958
Card 1/1

S/749/60/007/000/004/012

AUTHOR: Davitashvili, T.Sa.

TITLE: The concentration of M and F color centers in KCl monocrystals as a function of the X-ray radiation dose

SOURCE: Akademiya nauk Gruzinskoy SSR Institut fiziki. Trudy, 1.7, 1960, 89-98 (In Georgian, with 2-page Russian résumé).

TEXT: A laboratory investigation was made to determine the variation of the thermoluminescence of KCl monocrystals under X-ray radiation over a temperature interval from 20 to 200°C. Photoelectronic multipliers of the ФЭУ-19 (FEU-19) type and Cu-constantan thermocouples served as luminescence and temperature sensors. Samples 10x10x2 mm³ were cut out of monocrystals grown by the Kyropoulos method. The X-ray emitter (70 kv, 5 ma) was placed at 20 cm from the specimen. Exposures: 5 to 40 minutes. Two clear-cut peaks in the thermoluminescence curve appear at 88°C (corresponding to a thermoionization energy $E_1 = 0.76$ ev) and 183°C ($E_2 = 1.01$ ev). Comparison with data by other authors identify these two peaks as evoked by the thermoionization of M and F centers. Increased X-ray dosage does not shift the positions of the two peaks, but increases the area subtended by each. However, the first (initially higher) peak grows

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The concentration of M and F color centers ...

S/749/60/007/000/006/012

slowly and attains saturation at 30-40 minutes exposure; the second peak grows at an increasing rate and surpasses the first peak in height with increased exposure. A specimen exposed to X-rays and held in total darkness at room temperature for a prolonged time (e. g., 17 days) loses the first peak altogether; subsequent irradiation with the ordinary light of an incandescent lamp does not restore the lost peak, but repeated X-ray exposure will accomplish this. Dark soaking of X-ray-exposed specimens will also decrease the height of the first peak, but subsequent irradiation of slowly cooled specimens restores the original height. Graphic data are shown. Discussion of the test results is based on conventional theory (Seitz, F., Rev. Mod. Phys., v. 18, 1946, 384, and v. 26, 1954, 7) of the formation of neutral complexes out of single vacancies in the course of the growth of the monocrystal, and the formation of free electrons, holes, and single vacancies of both signs during X-ray exposure. Since, at room temperature, X-ray-produced single vacancies require appx. 10^5 sec to join into neutral complexes and the testing time was of the order of 10^3 sec, complex formation could not be complete. X-ray-produced anion vacancies serve to localize free electrons, and the appearance of F and M centers is regarded as the result of the fixation of free electrons by anion and neutral vacancy complexes. Greater X-ray doses increase the number of free electrons, holes, and single vacancies and, hence, of M and F centers. On the other hand, the number of neutral complexes is limited and the number of M-centers will gradually become saturated, no matter how great the dose of X-rays. By contrast, the

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number of F-centers is bound to increase so long as individual vacancies and electrons are generated. The present tests were not sufficiently extended to reach the end of that process. The M-centers are thermally unstable at room temperature; an ionized M center attracts single cation vacancies and either produces a neutral quartet or decays into a neutral pair and a single anion vacancy. Upon prolonged dark soaking the M-center becomes ionized and then decays. Hence, optical excitation cannot restore the first peak. Dark soaking at higher temperatures accelerates the ionization and decay of M-centers. Thanks are expressed to A.I. Gachechiladze for guidance and N.G. Politov for review of test results. There are 5 figures, 11 Soviet, 3 English-language and 1 German-language references (Przibram, K., *Verfärbung und Lumineszenz*. Springer Verlag, 1954).

ASSOCIATION: Non given.

Card 3/3

DAVITASHVILI, T.Sh.

Formation of color M-centers in KCl single crystals. Trudy
Inst. fiz. AN Gruz. SSR 9:153-157 '63. (MIRA 17:7)

L 16236-65 EPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/EWP(t)/EWP(b) Pr-4/Pt-10/
Pu-4 IJP(c)/ESD(g)/ESD(t)/ESD/AFWL/ASD(a)-5/AS(mp)-2/APGC(b) JD/JG/GG

ACCESSION NR: AP5000546 S/0051/64/017/006/0871/0879

AUTHORS: Davitashvili, T. Sh.; Politov, N. G.

TITLE: F centers in potassium chloride crystals irradiated in a
reactor 19 B

SOURCE: Optika i spektroskopiya, v. 17, no. 6, 1964, 871-879

TOPIC TAGS: F center, potassium compound, neutron irradiation,
x ray irradiation, optical absorption, absorption spectrum, crystal
lattice distortion

ABSTRACT: To check on the possible changes in the parameters of
the F band as a result of irradiation of crystals in the active
zone of an atomic reactor, the authors studied the F-band in the
spectra of additional optical absorption of potassium chlorite
crystals irradiated with neutrons in a reactor (10^{12} neut/cm² sec)
and by a ZBP(D)-200 x-ray tube (65 kV, 10 mA). Some 10--15

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L 16286-65
ACCESSION NR: AP5000546

samples measuring $16 \times 8 \times (2-0.5)$ mm were cut from a single crystal ingot grown by the Kiropoulos method from "specially pure" material. The samples were simultaneously irradiated at fixed points of the active zone of the atomic reactor, in integral neutron fluxes 2.16×10^{16} -- 3.6×10^{17} neut/cm². The irradiated samples were stored for some time (up to a month) to allow the induced radioactivity to drop to a permissible level. "Self-colored" and x-ray irradiated samples were investigated in parallel. The self-coloring was produced by the residual radioactivity of a crystal exposed to a neutron flux 3.6×10^{17} neut/cm² and stored for 21 months in darkness at room temperature. The optical absorption spectra were measured with SF-4 spectrophotometer with a cryostatic attachment that made measurements possible in the range 85--300K. The results show that the half-width of the F-band increases with increasing integral neutron flux. An investigation of the form and temperature dependences of the parameters of the separated F-band has shown that the observed broadening is not the result of over-

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ACCESSION NR: AP5000546

lapping different bands, but is due to the interaction of the F-center with the distorted crystal lattice. The conclusions are corroborated by a comparison of the theoretical parameters for F-centers with ideal and distorted crystal environments. Orig. art. has: 7 figures, 4 formulas, and 1 table.

ASSOCIATION: None

SUBMITTED: 20Nov63

ENCL: 00

SUB CODE: SS, OP

NR REF SOV: 003

OTHER: 007

Card 3/3

L 12979-66 EWT(1)/EWT(m)/EPF(n)-2/T IJP(c) GG
 ACC NR: AT6003162 SOURCE CODE: UR/3182/64/001/000/0042/0054

AUTHOR: Davitashvili, T. Sh.; Politov, N. G.

ORG: none

TITLE: Local centers in irradiated ionic crystals

SOURCE: AN GruzSSR. Institut fiziki. Elektronnyye i ionnyye protsessy v tverdykh telakh, v. 1, 1964, 42-54

TOPIC TAGS: ionic crystal, crystal deformation, crystal lattice distortion, color center, neutron irradiation, irradiation damage

ABSTRACT: An investigation was made of the relationship between the change in microstructure and the optical properties of coloration centers in potassium-chloride crystals irradiated in a reactor. Such investigations are important since F-center-type point defects exert a strong effect on fundamental properties such as stability, thermal conductivity, etc. Coloration centers are also used in studying the interaction of electron, hole, ion, and dislocation processes due to neutron irradiation in solid bodies such as alkali halide crystals. An attempt was thus made to show that changes in microstructure determine the generation and interaction of local electron and hole centers in irradiated alkali halide crystals. Specimens 13 x 10 x 1-1.5 mm, unannealed and unpolished, were simultaneously irradiated in an atomic reactor with neutron fluxes from 1.8×10^{15} to 3.6×10^{17} n/cm² under identical

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ACC NR: AT6003162

conditions. New "270 mμ" and "310 mμ" bands, previously unknown for crystals irradiated with x-rays, were observed in the absorption spectra. Absorption bands associated with aggregate coloration centers (R₁, R₂, M, and N) possessed higher thermal stability in comparison with crystals irradiated with x-rays. This was attributed to the appearance of inner emitters, upon which the effect of self-coloration depends. The halfwidth of the separated F-band in all crystals irradiated in the reactor, independently of irradiation dose, exceeded the halfwidth of the F-band in crystals irradiated with x-rays. A self-coloration F-band appeared in crystals irradiated in the reactor and then discolored either optically or thermally. The halfwidth of this band coincided with the halfwidth of the F-band before discoloration. A dependence of the halfwidth of the F-band on the integrated neutron flux and a correlation between the change of the halfwidth and the change of dislocation density and stability characteristics was observed. The widening effect of the F-band and the dose dependence of the halfwidth were attributed to radiative damage of the crystal lattice. Orig. art. has: 9 figures. [JA]

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 010/ OTH REF: 009/ ATD PRESS: 4/82

Cord

2/2

L 13869-66 EWT(m)/EWP(t)/EWP(b) IJP(c) JD
 ACC NR: AT6003164 SOURCE CODE: UR/3182/64/061/000/0101/0102

AUTHOR: Davitashvili, T. Sh.

ORG: none

TITLE: Cryostat for the SF-4 spectrophotometer

SOURCE: AN GruzSSR. Institut fiziki. Elektronnyye i ionnyye protsessy v tverdykh telakh, v. 1, 1964, 101-102

TOPIC TAGS: cryostat, spectrophotometer, light absorption, absorption spectrum

ABSTRACT: The author describes a cryostat for measuring optical absorption spectra on an SF-4 spectrophotometer at liquid nitrogen temperatures (see figure). The liquid nitrogen cylinder (1) has a capacity of 85 cm³ and is made from a thin-walled stainless steel tube. A cover (2) is soldered to the lower end of the cylinder and two screws (3) are used for fastening the crystal holder (4) to this cover. The crystal holder has windows (5) with dimensions of 12x7 mm². Flat plates (7), which slide along grooves (8) in the windows, and screws (9) are used for pressing the specimen to be studied (6) against flange (10) and the surface of the crystal holder. The

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L 13869-66

ACC NR: AT6003164

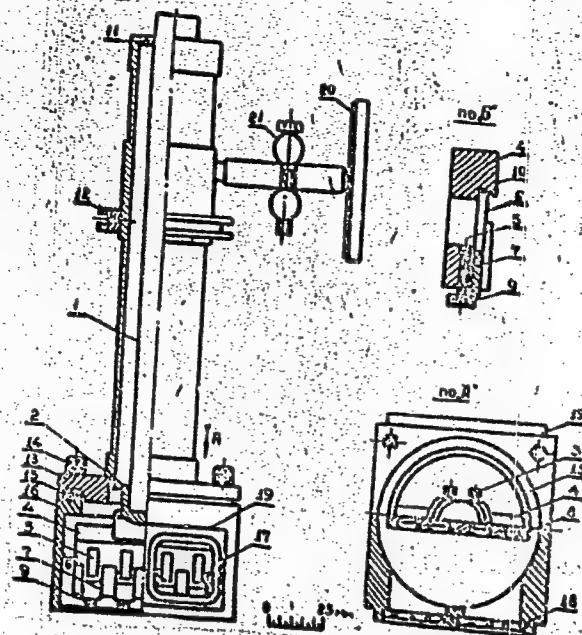


Fig. 1

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ACC NR: AT6003164

flange and plate are beveled to prevent the specimen from falling out when it is cooled. The crystal holder is made entirely from copper. The upper end of the cylinder is soldered to the cryostat housing. Fastened to the cryostat housing is ring (12). A rectangular base (13) is soldered to the lower end of the housing and pressed by four screws (14) to the vacuum seal (15) (a flat rubber ring) of the optical cell (16). On the two opposite faces of the optical cell are two pairs of windows (17) covered by quartz glass (18). A heavy paper cover on the visor (19) which borders each pair of windows protects the glass from damage. A vacuum is created in tube (20) and the rubber hose is closed off by clamp (21) before liquid nitrogen is poured into the cylinder. This cryostat may be used throughout the entire spectral range of the SF-4 spectrophotometer for making measurements simultaneously on three specimens. The cryostat is simple and reliable. Orig. art. has: 1 figure.

SUB CODE: 20/ SUBM DATE: 00/ ORIG REF: 001/ OTH REF: 002

Cord 3/3 mc

L 18837-66 EWT(1)/EWT(m)/EPP(n)-2/T IJP(o) GG
ACC NR: AP6006997 SOURCE CODE: UR/0051/66/020/002/0272/0275

AUTHOR: Davitashvili, T. Sh.; Politov, N. G.

ORG: none

21, 44, 55 21, 44, 55 19
TITLE: Optical properties of F-centers in potassium chloride crystals irradiated in a reactor

SOURCE: Optika i spektroskopiya, v. 20, no. 2, 1966, 272-275

TOPIC TAGS: neutron irradiation, potassium chloride, color center, crystal radiation effect

ABSTRACT: Previous studies of the form and temperature variation of optical absorption parameters in the F-band have shown that the theory developed for F-centers in an ideal surrounding is applicable also to F-centers in a distorted surrounding, although the theoretical parameters require considerable alteration. The authors compare the changes required in this case with those which follow from the configuration curve and analyze the optical properties of F-centers with distorted surroundings on the basis of this curve. The configuration curve is given by the four constants K_g , K_e , X_0 , and U_0 . The constants K_g and K_e are the elastic forces

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UIC: 548.0 : 620.192+535.37

L 18837-66

ACC NR: AP6006997

which displace the ions from their equilibrium position in the ground and excited states. The constants X_0 and U_0 are the abscissa and ordinate for the shift in the minimum energy of the excited state with respect to the unexcited state. It is found that the same conclusions may be drawn from analysis of the variations in parameters of the theory and those of the configuration curve with respect to the optical properties of F-centers. An increase in the integrated neutron flux during irradiation of the crystal reduces the Huang and Rhys parameter—S. This means that in the excited state the F-center takes up less volume than an F-center with an ideal surrounding (X_0 decreases), and there is also a reduction in the number of phonons corresponding to the absorption band maximum. The energy transmitted to the lattice by light absorption is constant (the Stokes shift is invariant); therefore there should be an increase in the energy of phonons generated by the absorption of light. Similar conclusions may be drawn from an analysis of variations in the parameters of the configuration curve (an increase in K_g and K_e and a reduction in X_0).

A comparison of experimental and theoretical data indicates that the luminescence intensity of F-centers in crystals irradiated in a reactor should not be affected by variations in the integral neutron flux and that there should be an increase in the half-width of the emission band. Orig. art. has: 1 figure, 1 table, and 5 formulas. [14]

SUB CODE: 20/

SUBM DATE: 07Dec64/

ORIG REF: 004/

OTH REF: 015

ATD PRESS: 4217

Card 2/2 MC

L 22265-66

ACC NR: AR6005178

SOURCE CODE: UR/0058/65/000/009/A020/A020

SOURCE: Ref. zh. Fizika, Abs. 9A173

AUTHORS: Davitashvili, T. Sh.

TITLE: Measurement of large optical densities with the SF-4 spectrophotometer

REF SOURCE: Sb. Elektron. i ionnyye protsessy i tverd. telakh. No. 1. Tbilisi, Metsniyereba, 1964, 98-100

TOPIC TAGS: spectrophotometer, optic density, photographic densitometer/ SF 4 spectrophotometer

TRANSLATION: A new method is proposed for measuring large optical densities, $D = 2-5$, which are usually difficult to measure because of the relatively small linear section of the light characteristics of the photoreceivers. In the proposed method, the requirement with respect to the region of linearity of the photoreceiver has been relaxed at the expense of a controlled increase in the intensity of the light flux passing through the high-density sample. This increase is attained by increasing the width of the exit slit of the monochromator. Results are presented of the measurement of large densities by this method with SF-4 spectrophotometer. According to the author's data, the error in the measurement of densities of the order of $D = 5$ is ± 0.06 .

SUB CODE: 20

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I 22263-66

ACC NR: AR6005176

SOURCE CODE: UR/0058/65/000/009/A019/A019

AUTHOR: Davitashvili, T. Sh.

TITLE: Cryostat for the SF-4 spectrophotometer

SOURCE: Ref. zh. Fizika, Abs. 9A157

REF. SOURCE: Sb. Elektron. i ionnyye protsessy v tverd. telakh. No. 1. Tbilisi, Metsniyereba, 1964, 101-102

TOPIC TAGS: cryostat, spectrophotometer, light absorption, absorption spectrum/SF-4 spectrophotometer

TRANSLATION: The article describes in detail the construction of a metallic cryostat for the measurement of optical absorption spectra in the temperature interval 85 - 300K using the SF-4 spectrophotometer. The cryostat is sufficiently simple and makes it possible to carry out measurements on three samples simultaneously. Not more than 50 - 60cc of liquid nitrogen is consumed per hour in maintaining the attained temperature.

SUB CODE: 20

Cord 1/1 nst

L 23784-66

EWT(1)/EWT(m)/EPF(n)-2/T IJP(c) GG

ACC NR: AR6005227

SOURCE CODE: UR/0058/65/000/009/E110/E110

AUTHORS: Davitashvili, T. Sh.; Politov, N. G.

TITLE: Local centers in irradiated ionic crystals ^{2/}

43
B

SOURCE: Ref. zh. Fizika, Abs. 9E910 ¹⁹

REF. SOURCE: Sb. Elektron. i ionnyye protsessy v tverd. telakh.
No. 1. Tbilisi, Metsniyereba, 1964, 42-54

TOPIC TAGS: ionic crystal, neutron irradiation, color center,
absorption spectrum, x ray irradiation, potassium chloride

TRANSLATION: The connection was investigated between the change in
the microstructure and the properties of local electronic and hole
centers in single crystals of KCl irradiated in a reactor (integral
neutron fluxes from 1.8×10^{15} to $3.6 \times 10^{17} \text{ cm}^{-2}$). The absorption
spectrum showed F and K bands and a band at 310 nm, which becomes
more intense as a result of the discoloring of the crystal by F-light
at liquid-nitrogen temperatures, with a maximum occurring at 270 nm.

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ACC NR: AR6005227

The half width of the F band depends on the irradiation dose and exceeds the half width in the spectrum of the x-irradiated crystal. A correlation is noted between the dose dependence of the half width of the band with variation of the density of the dislocations and with variation of the strength characteristics. In KCl with admixture of LiCl (0.7 mol.%) and NaCl (2 mol.%) irradiated with a dose of $1.2 \times 10^{16} \text{ cm}^{-2}$, bands were observed at 620 and 600 nm respectively, connected with formation of electronic A centers (the F center, in the first coordination sphere of which one of the ions of potassium is replaced by an Li or Na ion). In the spectrum of crystals irradiated at room temperature and at 90K, there was registered a hole V_2 band (230 nm), which is stable at room temperature, thus indicating the special conditions for the existence of hole centers in crystals irradiated with neutrons. The recovery of F bands (self coloring) and of optically or thermally discolored irradiated crystals, which is connected with the existence in the crystals of internal sources of radiation (impurities activated upon irradiation), is investigated. Yu. Tyutrin

SUB CODE: 20

Card

2/2 W

ACC NR: AT7000182

SOURCE CODE: UR/3182/65/002/000/0040/0045

AUTHOR: Davitashvili, T. Sh.; Zhvaniya, M. F.

ORG: none

TITLE: Thermoluminescence and optical absorption spectra of irradiated LiF crystals

SOURCE: AN GruzSSR. Institut fiziki. Elektronnyye i ionnyye protsessy v tverdykh telakh, v. 2, 1965, 40-45

TOPIC TAGS: neutron irradiation, irradiation effect, gamma irradiation, crystal absorption, crystal lattice dislocation, *thermoluminescence, absorption spectrum*

ABSTRACT: An investigation was made of the generation of dislocations in alkali halide crystals irradiated in an atomic reactor. Specimens 10 x 0.8 x 0.5 cm taken from a single crystalline ingot were annealed at 700K (one week), cooled slowly (two days) to room temperature, split into smaller 1.5 x 0.8 x 0.5 m specimens, and separated into three groups. The first group was irradiated in the active zone of a nuclear reactor at a normal temperature (310K, with a thermal neutron intensity of 1.1×10^{12} n/cm²·sec), the second was irradiated at low temperature (155K, with a thermal neutron intensity of 0.55×10^{12} n/cm²·sec), and the third was irradiated in a radiative gamma-loop at room temperature (dose rate 8×10^5 r/hr). With an increase in neutron flux or in gamma-ray dose, the intensity of the low-temperature peaks decreased, dropping to zero, and a new peak (or peaks) formed in the higher-temperature

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ACC NR: AT7000182

region. A displacement of peaks to the high-temperature side and a suppression of low-temperature peaks occurred. These changes were less noticeable in LiF crystals irradiated in the gamma-loop, and were not observed at all in KCl crystals irradiated in the reactor. It is concluded that the changes are the result of a specific neutron effect on LiF crystals: the amplification of the generation of radiative damages of the crystal lattice caused by the products resulting from nuclear reaction on the Li^6 isotope (high-energy alpha particles appearing in the crystal lattice itself) as the result of the capture of thermal neutrons. Orig. art. has: 5 figures. [JA]

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 001/ ATD PRESS: 5109

Cord 2/2

ACC NR: AP6026699

SOURCE CODE: UR/0181/66/008/008/2446/2449

AUTHOR: Davitashvili, T. Sh.; Politov, N. G.

ORG: Institute of Physics, AN GruzSSR, Tbilisi (Institut fiziki AN GruzSSR)

TITLE: Compressibility and structure of color centers

SOURCE: Fizika tverdogo tela, v. 8, no. 8, 1966, 2446-2449

TOPIC TAGS: color center, alkali halide, absorption band, impurity center

ABSTRACT: The effect of omnidirectional compression on the spectral parameters of color centers in alkali halide crystals is investigated. Ivey's equation for the shift in the absorption *F*-band (*Phys. Rev.* vol 72, p 341 (1947)) is low by a factor of two when certain crystals are subjected to pressure from all sides. The Ivey equation is modified by using the defect parameter instead of the lattice parameter. Parameters characterizing the displacement of the *F*-band in NaCl, KCl, KBr, and KI are given in a table. It is shown that the compressibility of the *F*-center is approximately twice that of the crystal. The pressure-induced shift in the optical absorption band is due to the decrease in distance between the ions which govern the compressibility of the capture center and to the effective field in which the optical transitions of the localized electron take place. Impurity (e. g., silver) absorption bands do not shift under pressure as much as the *F*-band. There may be an anomalous displacement of the impurity

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ACC NR: AP6026699

band in the long-wave direction when pressure is applied. If the impurity center has no vacancies, and the electron transitions take place only in the field of the impurity ion, the optical transitions in such a center can be compared to those in a hydrogen atom immersed in a dielectric medium. This is substantiated by experiment. Orig. art. has: 4 formulas, 1 table.

SUB CODE: 20/

SUBM DATE: 24Jun65/

ORIG REF: 005/

OTH REF: 012

Card 2/2

DAVITASIVILI, Ye.G.; MODEBADZE, M.Ye.

Mechanism of yttrium oxalate formation. Soob. AN Gruz. SSR
39 no.2:305-312 Ag '65. (MIRA 18:9)

1. Institut fizicheskoy i organicheskoy khimii imeni Melikishvili.
Submitted April 9, 1965.

DAVITASHVILI, Ye.G.; NANOBASHVILI, Ye.M.

Formations of lead sulfide in $\text{Pb}(\text{NO}_3)_2 - \text{Na}_2\text{S} - \text{H}_2\text{O}$ and $\text{PbCl}_2 - \text{Na}_2\text{S} - \text{H}_2\text{O}$ systems. Trudy Inst. khim. AN Gruz. SSR 13:93-102 '57
(Systems (Chemistry)) (Lead sulfide)

NANOBIHVILI, Ye.M.; DAVITASHVILI, Ye.G.; GIORGOBIANI, M.Ya.

Reactions of formation of gallium and germanium sulfides. Trudy
Inst.khim.AN Azerb.SSR 17:38-45 '59. (MIRA 13:4)

1. Institut khimii AN GruzSSR.
(Gallium sulfide)

(Germanium sulfide)

DAVITASHVILI, Ye.G.; KURASHVILI, S.G.; GIORGOBIANI, M.Ya.; NADAREYSHVILI,
Sh.A.; SHELIYA, N.G.

Chemicoanalytical characteristics of sedimentary rocks of some
oil fields in Georgia. Report No.1. Trudy Inst.khim. AN Gruz.
SSR 16:21-30 '62. (MIRA 16:4)
(Rocks, Sedimentary) (Georgia—Oil fields)

DAVITASHVILI, Ye.G.; KURASHVILI, S.G.

Determination of germanium in manganese ores. Soob. AN Gruz. SSR
29 no.2:143-149 Ag '62. (MIRA 18:3)

1. Institut khimii imeni Melikishvili, AN GruzSSR, Tbilisi.
Submitted April 11, 1960.

MZAREULISHVILI, N.V.; DAVITASHVILI, Ye.G.; GIORGOBIANI, M.Ya.;
NATIDZE, V.P.

Complex systems with metal hydroxides. Soob. AN Gruz. SSR
39 no.1:67-74 J1 '65. (MIRA 18:10)

1. Institut khimii imeni Melikishvili AN GruzSSR. Submitted
September 29, 1964.

MZAREULISHVILI, N.V.; GIORGOBIANI, M.Ya.; DAVITASHVILI, Ye.G.

Mechanism of the formation of lanthanum and cerium hydroxide.
Soob. AN Gruz. SSR 38 no.1:69-76 Ap '65.

(MIRA 18:12)

1. Institut khimii imeni Melikishvili AN GruzSSR. Submitted
Sept. 29, 1964.

DAVITASHVILI, Ye.G.; MODEBADZE, M.Ye.; SHELIYA, N.G.

Interaction of yttrium chloride with sodium, ammonium, and
potassium oxalates. Soob. AN Gruz. SSR 40 no.2:325-332 N '65.
(MIRA 19:1)

1. Institut fizicheskoy i organicheskoy khimii AN GruzSSR.
Submitted June 5, 1965.

DAVITAYA, F. F.

"The Density of a Rain Measuring Network for Agricultural Purposes," Met. i
Gid., No.5, p. 54, 1946

DAVITAYA, F. F.

"Prominent Representative of Soviet Agrometeorology (G. G. Selyaninov)," No 4, pp 89-91.
(Meteorologiya i Gidrologiya, No 6 Nov/Dec 1947)

SO: U-3218, 3 Apr 1953

HUBINSHTEYN, Ye.S.; GOL'TSBERG, I.A.; DAVITAYA, F.F.; DROZDOV, O.A.

Against vulgar simplification and dilettantism. Meteor. i gidrol.
no.4:100-103 '48. (MLRA 8:2)
(Atmospheric temperature)

Severe criticism of distribution maps of mean monthly air temperatures in Jan and Jun at earth's surface drawn up by Prof V. I. Vitkevich, Dr. Physicomath Sci, and published in Sovetskaya Agronomiya, No.5, 1947. Also criticizes Vitkevich's "Frosts and the Fight Against Them" in Sovetskaya Agronomiya, No.5/6, 1946, and deplores lack of information shown by a doctor who heads Chair of Meteorology, Timiryazev Agr. Acad. Submitted 15 Apr 48.

162T89

DAVITAYA F. F.,

FA 170T43

USSR/Geophysics - Agroclimatology

Dec 48

"Review of P. I. Koloskov's Book 'Agroclimatological Regional Division of Kazakhstan,'" F. F. Davitaya

"Meteorol i Gidrol" No 6, pp 114-121

Very favorable review of subject book, which reviewer regards as one of most important books to be published in recent years in this field. Submitted 25 Jan 48.

170T43

DAVITAYA, F. F.

"Certain Problems on the Development of Meteorology and Climatology in Connection with the Results of the Session of the All-Union Acad. of Agricultural Sciences im. Lenin," Iz. of the All-Union Geographical Society, Vol. 3, pp. 273-281, 1949

DAVITAYA, F. F.

27246. DAVITAYA, F. F.-- Moskovskoy oblastikornesobstvennyyu kul'turu vinograda.
Vinograda. Vinodelie i vinogradarstvo SSSR, 1949, No. 8, s. 20-23.

SO: Letopis' Zhurnal'nykh Statey, Vol. 36, 1949

24M7/20051
HERLYAND, M. Ye., kandidat fiziko-matematicheskikh nauk; GOL'TSBERG, I. A.
kandidat sel'skokhozyaystvennykh nauk; DAVITAYA, F. F., doktor
sel'skokhozyaystvennykh nauk; KRASIKOV, P. F., kandidat fiziko-
matematicheskikh nauk.

Combating frosts in the U.S.S.R. Meteor. i gidrol. no. 2:17-23
F '52. (MIRA 8:9)

1. GUGMS pri Sovete Ministrov SSSR, Leningrad, Glavnaya geo-
fizicheskaya observatoriya.
(Frost) (Crops and climate)

DAVITAYA, F. F.

"Tendencies and Methods of Agricultural Meteorology in the USSR," published
in Angewante Meteorologie (Applied Meteorology), No.7, 1952

DAVITAYA, F. F.

USSR/Meteorology - Agrometeorology Oct 52

"Results of Discussions on Agrometeorology,"
F. F. Davitaya, Dr Agr. Sci., Moscow, Main Admin
of Hydrometeorol Sv, Council of Ministers USSR

"Meteorol 1 Gidrol" No 10, pp 3-8

Discussions of agrometeorological problems,
which started in 1935 in "Meteorol 1 Gidrol"
No 3 and 4. Authors sharply criticize
ineptness of American meteorologists as
compared with "ingenious" Soviet methods.
Nevertheless, she states, the development of

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agrometeorological science in USSR is not
sufficient to meet the high demand of practice
in the Stalin plan for the transformation of
nature, comprising "magnificent" projects.
Notes that improvement of present state of agro-
meteorology and the strengthening of its coop-
eration with production are further aims of the
hydrometeorological service.

231761

DAVITAYA, F.F.

Petr Ivanovich Brounov on the occasion of the 100th anniversary
of his birth. Meteor. i gidrol. no. 4:3-14 Ap '53. (MLBA 8:9)
(Brounov, Petr Ivanovich, 1852-1927)

DAVITAYA, F. F.

"Status and Prospects for the Development of Soviet Climatology, According to the Results of the All-Union Conference," Meteorol, i gidrologiya, No 9, 1953, p 360

The author presents the results of the discussion on the principal problems of climatology which took place at the All-Union Conference in Leningrad 22-27 June 1953, and which have appeared in print. In the main the author expounds on the resolutions taken by the conference. (RZhGeol, No 5, 1954)

SO: Sum No. 568, 6 Jul 55

DAVITAYA, F.F.

Eucommia in the foothills of the northern Caucasus. Bot. zhurn. 39 no.4:
577-579 JI-Ag '54. (MLRA 7:10)

1. Maykopskaya opytная stantsiya, Vsesoyuznyy institut rasteniyevod-
stva VASKhNIL.

(Caucasus, Northern--*Eucommia*) (*Eucommia*--Caucasus, Northern)

RUBBER TREES

SINEL'SHCHIKOV, V.V.; ~~DAVITAI~~ F.F., redaktor; YASNOGORODSKAYA, M.M.,
redaktor; SOLOVEYCHIK, A.A., tekhnicheskii redaktor

[Hydrometeorological service at the All-Union Agricultural
Exhibition] Gidrometeorologicheskaya sluzhba na Vsesoiuznoi
sel'skokhoziaistvennoi vystavke. Pod red. F.F.Davitaia. Lenin-
grad, Gidrometeorologicheskoe izd-vo, 1955. 83 p. (MIRA 9:2)
(Moscow--Agricultural exhibitions) (Meteorology)

DAVITAYA, F.F., doktor sel'skokhozyaystvennykh nauk, redakter; MANOIM, L.F., redakter; SOLOVEYCHIK, A.A., tekhnicheskiy redakter.

[Agroclimatic and water resources of regions having virgin and waste lands to be reclaimed] Agroklimaticheskie i vodnye resursy raionov osvoeniya tselinnykh i zalesnykh zemel'. Pod red. F.F. Davitaya. Leningrad, Gidrometeorologicheskoe izd-vo, 1955. 463 p.

(MIRA 9:6)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeorologicheskoy sluzhby.

(Russia--Climate) (Water supply, Rural)

GERASIMOV, I.P., akademik; VASYUTIN, V.G., professor; DAVITAYA, F.F.,
professor KALESNIK, S.V.; SALISHCHEV, K.A., professor

[Problems in geography; a collection of articles for the 18th
International Geographical Congress] Voprosy geografii; sobrnik
statei dlia XVIIIgo Mezhdunarodnogo geograficheskogo kongressa.
Moskva, Izd-vo Akademii nauk SSSR, 1956. 394 p. (MLRA 9:10)

1. Geograficheskoye obshchestvo SSSR. 2. Chlen-korrespondent
AN SSSR (for Kalesnik)
(Geography)

BENEDIKTOV, I.A., redaktor; GRITSSENKO, A.V., redaktor; IL'IN, M.A., zamesti-
 tel' glavnogo redaktora, LAPTEV, I.D., LISKUN, Ye.F.; LOBANOV, P.P.,
 glavnyy redaktor; LYSENKO, T.D.; SKRYABIN, K.I.; STOLKTOV, V.N.;
 PAVLOV, G.I., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor;
 SOKOLOV, N.S., professor, nauchnyy redaktor; ANTIPOV-KARATAYEV, I.N.,
 doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; KARPINSKIY,
 N.P., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor;
 SHESTAKOV, A.G., doktor sel'skokhozyaystvennykh nauk, professor, nauch-
 nyi redaktor; RUBIN, B.A., doktor sel'skokhozyaystvennykh nauk, nauch-
 nyi redaktor; KOMARNITSKIY, N.A., dotsent, nauchnyy redaktor; LYSENKO,
 T.D., akademik, nauchnyy redaktor; POLYAKOV, I.M., professor, nauchnyy
 redaktor; SHCHEGOLEV, V.N., doktor sel'skokhozyaystvennykh nauk,
 professor, nauchnyy redaktor; YAKUSHKIN, I.V., akademik, nauchnyy
 redaktor; LARIN, I.V., professor, doktor biologicheskikh nauk, nauchnyy
 redaktor; SMELOV, S.P., professor, doktor biologicheskikh nauk, nauchnyy
 redaktor; EDL'SHTAYN, V.I., professor, doktor sel'skokhozyaystvennykh
 nauk, nauchnyy redaktor; SHCHERBACHEV, D.M., professor, doktor medi-
 tsinskikh nauk, nauchnyy redaktor; OGOLEVETS, G.S., kandidat sel'sko-
 khozyaystvennykh nauk, nauchnyy redaktor; YAKOVLEV, P.N., akademik,
 nauchnyy redaktor; YEKIMOV, V.P., agronom, nauchnyy redaktor [deceased],
 MYTINGEN, G.P., professor, doktor sel'skokhozyaystvennykh nauk, nauch-
 nyi redaktor; TIMOFEEV, N.N., professor, nauchnyy redaktor; TUROV,
 S.I., professor, doktor biologicheskikh nauk; YUDIN, V.M., akademik,
 nauchnyy redaktor; LISKUN, Ye.F., akademik, nauchnyy redaktor; VITT,
 V.O., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redak-
 tor; KALININ, V.I., kandidat sel'skokhozyaystvennykh nauk, nauchnyy
 redaktor:

(Continued on next card)

BENEDIKTOV, I.A.--- (continued) Card 2.

GRUBEN', L.K., akademik, nauchnyy redaktor; NIKOLAYEV, A.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; RED'KIN, A.P., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SMETNEV, S.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; POPOV, I.S., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; MANTYFEL', P.A., professor nauchnyy redaktor; INIKHOV, G.S., professor, doktor khimicheskikh nauk, nauchnyy redaktor; ANFIMOV, A.N., professor, nauchnyy redaktor; GUBIN, A.F., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; POLTEV, V.I., professor, doktor veterinarnykh nauk, nauchnyy redaktor; LINDE, V.V., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; CHERGAS, B.I., professor, doktor biologicheskikh nauk, nauchnyy redaktor; NIKOL'SAIY, G.V., professor, nauchnyy redaktor; AVTOKRATOV, D.M., professor, doktor veterinarnykh nauk, nauchnyy redaktor; IVANOV, S.V., professor, doktor biologicheskikh nauk, nauchnyy redaktor; VIKTOROV, K.P., professor, doktor veterinarnykh nauk, nauchnyy redaktor; KOLYAKOV, Ya.Ye., professor, doktor veterinarnykh nauk, nauchnyy redaktor; ANTIPIN, D.N., professor, doktor veterinarnykh nauk, nauchnyy redaktor; MARKOV, A.A., professor, doktor veterinarnykh nauk, nauchnyy redaktor; DOMRACHEV, G.V., professor, doktor veterinarnykh nauk, nauchnyy redaktor; OLIVKOV, B.M., professor, doktor veterinarnykh nauk, nauchnyy redaktor [deceased]; FLEGMATOV, N.A., professor, doktor veterinarnykh nauk, nauchnyy redaktor; BOLTINSKIY, V.N., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; VIL'YAMS, Vl.P., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; KRASNOV, V.S., kandidat tekhnicheskikh nauk, nauchnyy redaktor;

(Continued on next card)

BENEDIKTOV, I.A.---(continued) Card 3.

YEVREMINOV, M.G., akademik, nauchnyy redaktor; SAZONOV, N.A., doktor tekhnicheskikh nauk, nauchnyy redaktor; NIKANDROV, B.I., inzhener, nauchnyy redaktor; KOSTYAKOV, A.N., akademik, nauchnyy redaktor; CHERKASOV, A.A., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; DAVITAYA, F.F., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; IVANOV, N.N., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; ORLOV, P.M., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; LOZA, G.M., kandidat ekonomicheskikh nauk, nauchnyy redaktor; CHERNOV, A.V., kontrol'nyy redaktor; ZAVARSKIY, A.I., redaktor; ROS-SOSHANSKAYA, V.A., redaktor; FILATOVA, N.I., redaktor; YEMEL'YANOVA, N.I., redaktor; SILIN, V.S., redaktor BRANZBURG, A.Yu., redaktor; MAGNITSKIY, A.V., redaktor terminov; KUDRYAVTSEVA, A.G., redaktor terminov; AKSENOVA, A.P., mladshiy redaktor; MALYAVSKAYA, O.A., mladshiy redaktor; PEDOTOVA, A.F., tekhnicheskij redaktor

(Continued on next card)

BENEDIKTOV, I.A.---(continued) Card 4.

[Agricultural encyclopedia] Sel'skokhoziaistvennaia entsiklopediia.
Izd.3-e, perer. Moskva, Gos. izd-vo selkhoz. lit-ry. Vol.5. [T-IA.]
1956. 663 p. (MIRA 9:9)
(Agriculture--Dictionaries and encyclopedias)

14-57-7-14764

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7,
pp 84-85 (USSR)

AUTHOR: Davitaya, F. F.

TITLE: Deliberate Man-Made Climatic Changes (Napravlennoye
izmeneniye klimata antropogennymi faktorami)

PERIODICAL: V sb: Vopr. geografii, Moscow-Leningrad, AN SSSR,
1956, pp 160-169.

ABSTRACT: The author reviews the literature on microclimatic
changes. Climate can be improved in the following
ways: 1) irrigation and introduction of water;
2) desiccation and deforestation; 3) planting forest
belts to protect fields and establishing forest masses;
4) snow utilization; 5) working of soil, use of agro-
technology, and raising of crops; 6) artificial heating
of crops to combat frost damage. Intelligent appli-
cation of several such measures is the surest way to
bring about climatic change in the active layer. A
careful study has been made of ways in which various

Card 1/3

14-57-7-14764

Deliberate Man-Made Climatic Changes (Cont.)

techniques may be combined in order to change the temperature, the moisture content, and the relation between these two factors. A plan has been devised for altering hydro-meteorological conditions; it takes into consideration the width, height, and composition of forest belts, as well as irrigation periods and norms under various climate and weather conditions. It is the chief task of forest belts to protect fields from wind (forests serve to decrease its speed and check its vertical circular movements over fields). A forest belt must be sufficiently open and must have as few wide gaps as is possible. Its open spaces should be no more than 10 m to 20 m wide. The presence of forest belts and the use of advanced reclamation techniques on soils with a good structure will increase productive moisture content in a 1-m layer of the soil in the arid zone of the USSR from 60 mm in the south to 100 mm in the northeast. The depth and duration of absolute minimum temperatures as well as average daily temperature levels can cause forest damage to crops. Frost is considered dangerous when the temperature sinks no more than 3° to 5° below the level which is critical for plants of a given region. If the temperature in the European USSR could be

Card 2/3

14-57-7-14764

Deliberate Man-Made Climatic Changes (Cont.)

artificially raised as much as 1° , damage to grapes would be half as great as it is now. If it could be raised 1° to 1.5° , frost danger would be virtually eliminated. Effectiveness of smudging is proportional to the amount of heat generated by the smudge piles; for this reason the piles should be composed of dry material. Sensible crop raising methods in the northern regions can increase the sum of temperatures of all periods above 10° by 200° to 300° ; i.e., they can bring the temperatures up to the level which, under natural conditions, is approximately the same as the level found 200 km south of this area. A bibliography of 23 titles is included.

Card 3/3

L. A. K.

DAVITAYA, F.F.

Aleksandr Ivanovich Veeikov (on the occasion of the fortieth anniversary of his death. Meteor. i gidrol. no.3:7-11 Mr '56.
(Veeikov, Aleksandr Ivanovich, 1842-1916) (MLRA 9:7)

DAVITAYA, F.F.
GERASIMOV, I.P.; ARMAND, D.L.; BUDYKO, M.I.; DAVITAYA, F.F.; DZERDZHEYEVSKIY, B.L.;
KUNIN, V.N.; L'VOVICH, M.I.; RIKHTER, G.D.; SHLIVTSOV, P.F.

Thermal and hydrological regime of the earth's surface, its role in the
dynamics of natural processes, geographical differences, and methods of
transforming it for practical purposes. Izv. AN SSSR, Ser. geog. no. 4:
47-59 J1-Ag '56. (MLRA 9:10)

(Hydrology)

DAVITAYA, F.F., doktor sel'skokhoz.nauk; MOVSISIYANTS, A.P., otv. za vypusk

[Natural and climatic conditions and differentiated farm
management] Prirodno-klimaticheskie uslovia i differentsirovannoe
vedenie sel'skogo khoziaistva. [Moskva, M-vo sel'.khoz.SSSR, 1957]
19 p. (MIRA 11:12)
(Crops and climate) (Farm management)

DAVITAY, F.F.

SINEL'SHCHIKOV, Viktor Vasil'yevich; ~~DAVITAY, F.F.~~, redaktor; YASNOGORODSKAYA, M.M., redaktor; SOLOVEYCHIK, A.A., tekhnicheskii redaktor

[Hydrometeorological service at the All-Union Agricultural Exhibition] Gidrometeorologicheskaya sluzhba na Vsesoiuznoi sel'skokhoziaistvennoi vystavke. Izd. 2-oe, perer. i dop. Pod red. F.F.Davitaia. Leningrad, Gidrometeor. izd-vo, 1957. 86 p.
(Moscow--Agricultural exhibitions) (MLRA 10:10)
(Hydrometeorology)

DAVITAYA, F. F.

VOYEYKOV, Aleksandr Ivanovich; ~~DAVITAYA, F. F.~~, otvetstvennyy redaktor;
PETUNIN, I.M., redaktor; YASNOGORODSKAYA, M.M., redaktor; FLAUM,
M.Ya., tekhnicheskiy redaktor

[Selected works; agricultural meteorology] Izbrannye sochineniia;
sel'skokhoziaistvennaia meteorologiya. Leningrad, Gidrometeor.
izd-vo, 1957. 256 p. (MLRA 10:9)
(Meteorology, Agricultural)

DAVITAYA, F.F.

VAVILOV, N.I. akademik; BAKHTEYEV, F.Kh., professor, doktor sel'skokhozyaystvennykh nauk, otvetstvennyy redaktor; BARANOV, P.A., redaktor; BAKHTEYEV, F.Kh., redaktor; DAVITAYA, F.F., redaktor; ZHUKOVSKIY, P.M., redaktor; IVANOV, N.P., redaktor; SUKACHEV, V.N., akademik, redaktor; TSITSIN, N.V., akademik, redaktor; VIKHREV, S.D., redaktor izdatel'stva; BLISIKH, E.Yu., tekhnicheskij redaktor.

[World resources of varieties of grain, pulse crops and flax, and their utilization in plant breeding Agroecological survey of the most important field crops] Mirovye resursy sortov khlebnnykh zlakov, zernovykh bobovykh, l'na i ikh ispol'zovanie v selektsii. Moskva, Izd-vo Akad.nauk SSSR. Opyt Agroekologicheskogo obzreniya vashneishikh polevykh kul'tur. 1957. 462 p. (MLA 10:5)

1. Chlen-korrespondent Akademii nauk SSSR (for Baranov) 2. Deystvitel'nyy chlen Vsesoyuznoy Akademii sel'skokhozyaystvennykh nauk im. Lenina (for Zhukovskiy)

(Field crops)

DAVITAYA, F. F.

AUTHOR: Davitaya, F. F.

TITLE: The Geographic Congress in Brazil (Geograficheskiy kongress v Brazili)

PERIODICAL: Meteorologiya i Gidrologiya, 1957, No. 1, pp. 59-60 (U.S.S.R.)

ABSTRACT: Minutes are presented from the 18th International Geographic Congress and the 9th General Assembly of the International Geophysics Society both held at the same time (Aug. 9 - 19, 1956) in Rio de Janeiro (Brazil). Eight hundred scientists representing 50 countries took part in the congress. The Soviet scientific delegation consisted of: I. P. Gerasimov, M. B. Gornung, F. F. Davitaya (author), P. K. Zamoriy, S. V. Kalesnik, M. Ye. Lyakhov, V. V. Pokshishevskiy, K. A. Salishchev, Yu. G. Saushkin, A. N. Formozov and P. N. Tsya'. The reports by A. Alpert (USA), V. Kauer, I. Blutgen, G. Lautensakh (W. Germany), G. Gaussen (France), N. Konchek (CSR), Zh. Trikar (France) and A. B. Bataglia (Mexico) are considered the most interesting of the total of 23 reports presented at the Congress. The exhibition of geographic maps and books is described briefly. The 9th General Assembly of the

Card 1/2

DAVITAYA, F.F.

Meteorological service of Brazil. Meteor. i gidrol. no. 3:60-63

Mr '57.

(MLRA 10:5)

(Brazil--Meteorology)

DAVITAYA, F.F., doktor sel'skokhoz.nauk, red.; SHUL'GIN, A.I., red.;
SUVALOV, I.S., red.; ANTONOVA, N.M., tekhn.red.

[Problems in the agroclimatic zoning of the U.S.S.R.; a collection of articles] Voprosy agroklimaticheskogo raionirovaniia SSSR; sbornik statei. Pod red. F.F.Davitsia, A.I.Shul'gina. Moskva, Izd-vo M-va sel'skogo khoz. SSSR, 1958. 131 p. (MIRA 12:2)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.Lenina. 2. Predsedatel' sektiia agrometeorologii Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Davitaya).

(Crops and climate)

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AUTHOR: Davitaya, F.F. SOV/10-58-5-21/28
TITLE: The Investigation of Droughts and Dry Winds (Issledovaniye zasukh i sukhoveyev)
PERIODICAL: Izvestiya Akademii nauk SSSR - Seriya geograficheskaya, 1958, Nr 5, pp 131-136 (USSR)
ABSTRACT: This is a review of two collective volumes: 1) "Dry Winds, Their Origin and Their Prevention", published by the AS, USSR in 1957, and 2) "Droughts in the USSR, Their Origin, Recurrence and Effect on the Crop", editor A.I. Rudenko, Gidrometeoizdat.

Card 1/1

AUTHOR: Davitaya, F.F. SOV/10-59-1-2/32

TITLE: Scientific Principles of Drought-Fighting in Different Natural Zones of the USSR (Nauchnyye osnovy bor'by s zasukhoym po prirodnyim zonam SSSR)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya geograficheskaya, 1959, Nr 1, pp 7-28 (USSR)

ABSTRACT: This article is based on the content of a lecture delivered by the author at a session of the Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I. Lenina (All-Union Academy of Agricultural Sciences imeni V.I. Lenin). The author elucidates the causes of droughts and examines various geographical, agrotechnical and selective-genetical methods of combating the droughts by direct and indirect measures, i.e. by influencing the causes engendering droughts, and by adapting the economy to the evils of drought in such a way as to preclude essential losses in harvests. She considers various ways of applying such measures as following

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of fields, development of field-protection by forestation, retention of snow on the fields, retention of thaw waters, irrigation, etc. The article draws the attention of all concerned to the necessity of intensification of drought-fighting, stating that droughts strike primarily in the steppe and forest-steppe regions, which comprise 90% of the total arable land of 210,000,000 hectares. There are two tables, 8 charts and 7 Soviet references.

ASSOCIATION: Glavnoye upravleniye gidrometeosluzhby SSSR (Chief Administration of Hydrometeorological Service of the USSR)

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